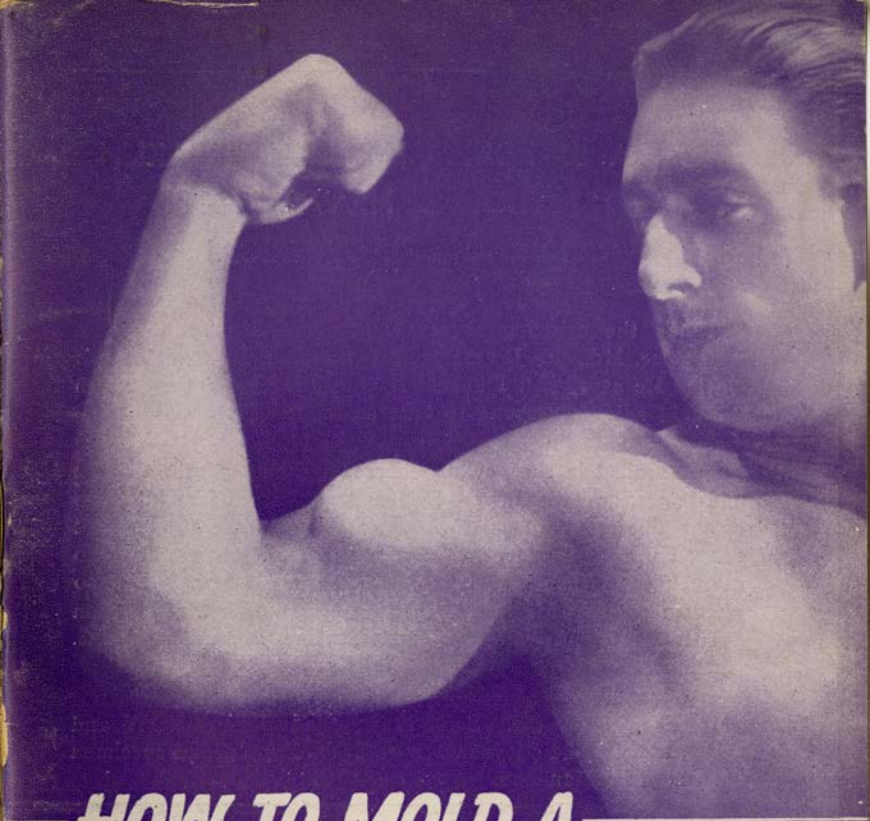


HOW TO MOLD A MIGHTY ARM

By GEORGE F. JOWETT

FROM A 97 POUND PHYSICAL WEAKLING TO NATIONAL HEAVYWEIGHT CHAMPION OF AMERICA!

That's the amazing success story of Albert Manger of Baltimore, Md., the Jowett pupil pictured on the cover of this book. He says, "All I have I owe to Jowett teaching, which I would advise everyone to take as the BEST."

He enrolled in the Jowett Course, a skinny youth, all skin and bones, and the Jowett System transformed him into one of the finest specimens of American Manhood. All he first desired was to improve his physique and his low vitality into normal, to deepen his chest and enlarge his arms. But so phenomenal was his growth in size and strength that he soon got interested in athletics and became a National U. S. Champion.

Do as Manger did. Send in your Enrollment NOW and YOU, too, can be on your way to becoming a proud specimen of American Manhood.

Published by
The Jowett Institute of Physical Culture
230 FIFTH AVENUE NEW YORK 1, N. Y.
Copyright 1938. All rights reserved.

MOLDING A MIGHTY ARM

By GEORGE F. JOWETT

"And the Muscles of his brawny arms
are as strong as iron bands."

EVERY day as I grow older I believe more than ever that the impressions created in our youth form an indelible mark upon our minds. Throughout the years dating from my boyhood into manhood, I have always looked upon the arm as the indicator of a man's physical strength and ability. While I know it is only one of the many parts that go to make up a perfect body, on the other hand what use is a strong body without a pair of equally powerful arms? Just as much use as a derrick with a weak hoist. It is no use talking. I am just as much impressed today with a strongly built arm as ever I was in my imaginative youth. It is the first thing that catches the eye. I can recall quite vividly the old smithy shop where I used to watch the blacksmith pound iron on the anvil. He looked for all the world like the subject used to illustrate Longfellow's "The Village Blacksmith." Since those days I have seen thousands of powerful armed men, some who were prodigies in arm power, and the more I saw of them the greater my desire became to possess a pair of arms as well muscled and as strong as the best of them. It seemed a pretty wild ambition to foster with only a 12 inch biceps to begin with but I had faith that some day I would wear proudly and gracefully an arm that had a biceps circumference of 17 inches, but the day came when I surpassed the 17 inch mark and not only that but I was able to perform every feat of arm strength I had ever seen done. Many have made the statement that I am the strongest armed man living. Whether this be true or not, I don't care. What I do know is I built for myself both in size and power an arm from wrist to shoulder beyond the mark I set for myself as a youth. Many young fellows have said to me, "If only I could get an arm like yours," and many the young fellow I have shown how to get it—which brings us to the point that most interests you.

Just by curiosity I wonder how much your arm measures. I also wonder if the moment you read the last sentence you thought of the size of your biceps as the index of your arm size. If so I want you to forget it. Remember there are five arm measurements and unless these balance your arm is out of proportion no matter how small or how large it may be around the biceps.

These are the five arm measurements:

1. The wrist measurement.
2. The forearm, held relaxed by the side.
3. The forearm, tensed in the position that provides it with its greatest bulk.
4. The upper arm in its relaxed state with the arms held straight by the side.
5. The upper arm with the forearm flexed upon it.

The wrist has only one measurement no matter how you twist or bend it, and indicates the quality of the forearm size.

The forearm relaxed gives one an idea of its balance and breadth when viewed from the outside while in its tensed position it tells the story of the inside fullness and the muscular ability of the forearm muscles to contract and extend under movements of resistance.

The upper arm when relaxed will describe the development of your triceps which form the back of the upper arm, while in a contracted state we think of only the biceps.

These are five important points for you to consider when talking about the measurement of the arms. I say this in all good faith because you know as well as I do if you asked twelve men on the street the size of their arms the twelve are likely to give you the size of their biceps and forget about the rest which is the reason why many exercise fans concentrate solely upon building up big biceps.

Did you ever stop to consider that there are several forms of biceps development? I bet you never did, nevertheless as I mention them you will recall seeing the types on different exercise fans that you probably are acquainted with.

There is the biceps that bunches up in a little knot as the arm is flexed leaving a long narrow space between the elbow joint and the biceps. Then we have the biceps that give the impression of always being in a contracted state. Also the biceps which shortens the arm in such a manner as to prevent the arms from naturally assuming a straight position. This is allied closely to the biceps with the stringy appearance that gives one the creeps as it becomes flexed. All these biceps conditions are the products of various methods of exercise none of which is right. Rather might they be

termed muscular deformities rather than muscular development. You have only got to try out the owner of any one type of the biceps mentioned to see how limited their action is.

Nearly every system develops a muscular biceps peculiarity which is immediately recognized by the teacher of body building The same thing holds good with athletes. There is the baseball arm, the rowing arm, the chinning arm, the weight lifter's arm. the hand balancing arm, and the wrestling and boxing arm. Each is only good in the particular use to which they have muscularly been educated and developed.

I do not think I am boastful when I make the statement that I have seen more of arm conditions than any other man in the country. Because I am the only teacher who has been a successful physical culturist of the competitive type, I have been placed in a better position to observe. Among weight lifters I have seen more of arm evils than in any other type, excepting, of course. the arm of the chinning fiend. More than any other type weight lifters "mine" the muscle. This term may be a little new to you but to get the idea of what I mean, out in the west farmers once had the habit of growing grain year in and year out without fertilizing the land, until the land became beggared of nourishment and poor crops followed. It was a get rich scheme and today mining the land for all it is worth is forbidden. Yet that is what weight lifters do. They practice all the exercises that will promote size by forcing growth. The result is the muscles become only capable of momentary effort. They work strongly but in spasms, then become quickly fatigued. These boys never think of the little dynamic muscular reservoirs and instead of filling them with vitality they deprive them of their nutritive sources. Also these exercise fans rarely have the forearm development in the same relative proportion as to their upper arm. Hand balancers secure the nicest all round development. You will always see a good hand balancer with an arm built powerfully from wrist to shoulder. The wrestler has a good upper arm and a strong grip but generally wears a poor forearm. The wrestling arm is a strong composition of strength and suppleness. Few wrestlers are good at lifting heavy barbells or dumbbells, yet a good second class wrestler can easily overcome a first class weight lifter. The difference is in the type of exercise as I have previously stated. The weight lifter has rigid muscles that cannot stand the contortion of wrestling and twisting and more particularly they fail to build their muscles right. Wrestlers, as a rule. do not touch heavy weights and therefore do not acquire rigid muscles which makes it difficult for them to sustain any heavy weight overhead. Yet, they are usually able to snap an opponent

off the mat and hurl him overhead time after time and I doubt if I can recall of any single specialized weight lifter who could move the same man from the same position. By all means the arm of the wrestler is more capable of endurance. More so than the arm of any other athlete and his grip is, nine times out of ten, superior to that of the majority of weight lifters.

Now mind you I am not knocking weight lifting. I am giving you frank comparison irrespective of personal feeling. I know there are some who preach weight lifting as a cure-all, but those same people I challenge to prove it by their own personal abilities, while I have been successful in both branches of athletics.

There are two outstanding figures in the history of strongmanism and wrestling whom you will doubtless recall, namely George Hackenschmidt and George Lurich.

Both these men were marvels in feats of lifting and were in their day invincible on the mat, but their methods of training were not the methods some people try to make believe. They were men with a perfect understanding of the bodily mechanism who both followed the same system of training, which was thorough and provided them with the dual qualities of muscular rigidity and relaxation at the right time, also with fountains of reserve energy and inexhaustible endurance. Both these men possessed magnificent arms that had a mighty circumference on all five points, yet were gracefully shaped and leaping with life.

Our talk being of the arm our studies shall begin with the biceps and work down toward the wrist covering every point that will enable you to build the same type of an arm possessed by these two men and others. My system of arm building, which I faithfully followed, in the end rewarded me with the arms which I proudly own.

The arm commences from the arm pit, a point rarely understood by exercise fans, much to their detriment. It is in this area that the greatest mass of arm nerves lies buried in the folding flesh. In other words, there lies the source of your arm electricity and vibration which decides more or less how much kick or action your muscles possess. In the topmost part of the arm are several muscular connections, mostly on the back and on the inside. The most important of these are the chest muscles and the big back muscles, all of which are affected by the various arm actions. Most important is the biceps; that fascinating two fold muscle which displays its size on the front of the upper arm, being by far the largest arm muscle. This muscle is not fastened entirely upon the upper bone of the arm, only the highest and the lowest parts of the biceps are attached; one connection is the upper arm and the other to the forearm, so that when the biceps

contracts it pulls the forearm toward the shoulder enabling you to touch your head or place an object upon the shoulder. This twin muscle fits inside of a sheath that tapers off at each end into very powerful sinews or ligaments which are firmly seated upon the bones of the arm with a ribbon like attachment. The biceps muscle is capable of its greatest power when the arm is curled toward the shoulder with the palm of the hand directly facing, yet it is strange to note how this same muscle will contract under different hand movements.

If you curl the hand to the shoulder with the palm of the hand bent on the wrist toward the shoulder you will obtain powerful contraction, so severe under great effort as to make the muscular contraction almost hurt, which in an undeveloped state will cause the biceps to cramp, but just straighten the hand on the wrist and you will immediately see how the biceps action changes. The biceps will not "ball" up so greatly, its power will be restricted and the muscle itself will be spread out at greater length over the upper arm, but, the depth of ligament tissue that comprises the substance between the elbow and biceps will accentuate more. The reason for this is the biceps, being deprived of a certain amount of its contractive power, calls the ligaments into action to maintain the position and power in much the same manner as levers of machinery hold a pull.

Now turn the hand completely around so the palm faces away and curl the fist to the shoulder and you get a different effect altogether. The biceps spreads out completely all over the upper portion so much as to make the depth equal from shoulder to elbow. The more you allow the hand to bend forward or downward on the forearm the greater power will you possess. With most people this is a weak biceps position which should not be, but is, due to the undeveloped state of the biceps muscle. Usually when a person lifts a heavy object to the shoulder they must do so quickly in order, as they say, to get a start, but in reality it is to offset their biceps weakness.

The majority of heavy weight lifters are very poor in this movement, despite the size of their biceps, for two reasons: one because they rarely have sufficient inside forearm development which plays an important part in the movement, and secondly because their biceps have too much contraction. Early in my body building career I found this out and immediately offset it by developing the inside of my forearm and accustoming the biceps to pull in this particular movement that called for strong biceps extension. Remember the last word as most biceps exercise and demonstration is effected in contraction. Of course the biceps are more powerful in direct contraction, nevertheless, a

person does not have to be very bright to realize unless the biceps is strong from all positions and in all pulls it is only partially strong.

The biceps muscle is strongest in direct contraction though its division gives it a dual agency necessary because of the rotating action of the forearm which allows us to twist the hand. Turning movements of the hand have a special effect upon the forearm muscles, the most important of these—the supinator longus—having a natural twisting movement. It should always be remembered that the biceps attachment upon the forearm is two-fold, branching from the thick round biceps ligament into two flat ribbons that fit one upon each bone of the forearm.

This explains almost all of the various biceps action and tells you the biceps are mainly capable of direct and indirect volition but our story of the front of the upper arm does not end here. The side movements of the arm are not controlled by the biceps but by a muscle that fits on the floor of the upper arm in such a manner as to be almost hidden from visible identification, though in a few rare instances I have seen this muscle defined to the eye. This particular muscle is known as the brachialis anticus and is a deep-seated muscle which passes directly over the front of the elbow joint arising from the humerus or bone of the upper arm above and passing to the ulna (one of the forearm bones) below. This muscle aids as a flexor of the forearm and what should interest you is that this muscle actually has an influence on the size and shape of the biceps.

Few body builders I have come in contact with know anything about this muscle, but the one who does know it makes his upper arm muscles more capable, shapely and larger.

One of the few men I recall who displays this superficial muscle to a decided extent is Chas. Vanstittart, the man who was known for many years as "the man with the iron arm." He is a man well blest financially but arm strength fascinated him to an amazing extent. He studied this particular member of the body and developed it to the most extraordinary state I ever saw. He is not what you would call a heavy man, being a little over 6 ft. and weighs stripped in the neighborhood of 185 or 190 lbs., yet his biceps measurement is 18¼ and it is perfectly built, balanced to a hair's breadth in development.

Talk about bending irons and breaking chains or twisting iron. He makes any man I have ever seen on the stage look like a pigmy.

Somehow the idea has crept into the minds of our young exercise fans that the right thing to do in building big arms is to

isolate his practice. By that I mean if he is eager to build up a big strong pair of biceps he will subject himself to one form of practice like chinning the bar or curling a long handled barbell to the shoulder. Both are worthy of consideration but neither will give you a biceps of the all around order. The arm of the "chinning" fiend is really dangerous. It develops a baseball biceps that acquires so much contraction as to cause a permanent and noticeable shortening of the biceps, simply because the chinning action is one seldom practiced from the complete arm hang on account of its difficulties. For this reason there is insufficient biceps extension.

Curling entirely with a long-handled barbell does not give a complete biceps contraction. Where chinning gives too much contraction, curling gives insufficient. The start off in curling is all right but the moment the angle of the forearm with the elbow goes past the degree of right angles the biceps begins to flatten as the amount of weight forces the elbow back. This causes the forearm in most cases to fold quickly upon the biceps making only a partial contraction. Some seem to think the heavier weight they can curl the greater results are given to the upper arm, but prove it to yourself. You will strain tremendously through the first stages, so much that the strain is as evident on the body as the arms, this will cause you to bend backwards and the moment the arm passes its right angles you will find the arm folds quickly, to your relief, but you are getting nowhere. You are worse off with a real heavy weight than with one you can easily handle. The moment you begin to bend backwards the movement is through as a beneficial exercise.

There is another form of curling performed with a cable exerciser. My objection to this is because the exerciser is usually too long to give complete arm extension and contraction. Then you are obliged to perform too many repetitions which end up with the development of a peanut bicep. You know what I mean, the biceps that is small and knotted. In others we get the stringy type from too many repetitions and too little resistance.

The thought you should absorb is that you cannot build your muscles in a one-way rut. If you do, you can only expect a one-track action. The moment you try to perform a movement adverse to this one set path you are out of luck.

The greatest specialists in every line are found to draw on other lines for their complete knowledge and when you need all round strength and ability, size and appearance, you have to build from every angle but in such a manner as to coordinate as many of the movements into one as is possible.

It is for this reason I am proud of the Jowett Institute Course of Body Building where everything is reduced to an exact science that will give the maximum results at a minimum of time and effort.

There is another thing to consider in biceps formation. It differs with people; some have what we term a high biceps while others have a long biceps, the difference being caused in the natural length of the biceps bellies.

Where the biceps is clearly defined so as to show the separation of the double head you will see the outer part is somewhat longer than the inside length.

Some claim the high biceps are strongest. Why, I don't know. They are never able to advance any proof. For my part I would say it is the reverse. The long heavy biceps has more structure, therefore more power, and if you notice the biceps of any real strong man you will see how completely they appear to fill the entire space of the upper arm.

When carefully developed the biceps have terrific power. I have seen John Marx wrap a piece of chain around the biceps while the arm was held out straight, and by forcibly flexing the arm burst the chain apart by force of the contracting biceps.

One thing sure, the biceps is the easiest part of the arm to develop but the triceps which forms in a horseshoe shape on the back of the arm creates many difficulties. Most arms you will see are as flat on the back as though nature never intended any muscle to be there. It is this threefold or triceps muscle which gives the real appearance to the arm, particularly when in the relaxed position.

You can quickly form an estimate of your triceps development by clasping the hands behind the back. Grip the hands strongly and force the arms down straight as you throw the shoulders back. If you have any semblance of a triceps they will certainly show up. This muscle has three parts to it as its name implies—the inner head, the outer head and the center. Most development is displayed by the center head because of its greater bulk. The inside and outside parts present a little more difficult picture.

You will find all hand balancers have splendid triceps as well as those who are good at slowly pressing a heavy object overhead. Exercise fans who practice the "dipping" exercise develop good triceps.

This muscle acts contrary to the biceps. Whereas the biceps is a powerful flexor of the arm, the triceps are powerful extensors of the arm; that is, they straighten the arm.

A person who practices too much "chinning" the bar, or weight curling, is never good on raising a heavy dumbbell overhead.

This type develops their biceps at the expense of the triceps, leaving the arms unbalanced with the triceps the weak sister.

Due to the fact that this muscle is attached upon the shoulder blade it helps to lower an object from the overhead position. Of course its strongest feature is in straightening the arms by reason of its attachment on the forearm bones as well as upon the bone of the upper arm.

Sometime when you have a fairly heavy dumbbell handy, lift it to the shoulder and without jerking or moving the body, slowly raise the dumbbell to arm's length. You should not be surprised if you are unable to raise the object high enough to make the arm perfectly straight. It is likely the arm will appear a little bent because your triceps are not strong enough. This will make itself more evident the heavier the object you try to handle.

The triceps is the chief muscular motor in supporting the grip when carrying a heavy valise or other object in the hand, in the arm-hang position. When a boxer has a well developed triceps he has a well developed punch and the baseball pitcher has a swifter pitch to his ball.

The most important to remember when practicing exercises for the upper arm is that balance of the triceps and biceps is essential. No matter how large your biceps becomes if it lacks the relative triceps development, the physical ability of your arms will be inferior to the man who has a much smaller measured arm but with a better balanced appearance.

Balance of these two muscle groups is what will give the arms a rapier like swiftness with dynamic power.

Leaving the upper arms we will pass on to the forearm, the one half of the arm which on most well built men is poorly developed. It is truly said the forearm and calves are the hardest muscles in the body to develop. The forearm presents much natural difficulty simply because the muscles that comprise the bulk of the forearm are many and each is composed of very little muscular tissue. They seem to run all to stringy cords. Just the same the forearm muscles can be built up so that they are beautifully shaped.

The forearm muscles lie on the front, back and side, being marvelously constructed to perform the duties of the arm. The muscles that are on the outside are the easiest developed, but those on the inside are the hardest to develop. These muscles on the front of the forearm make the appearance of the forearm just as the triceps make or mar the appearance of the upper arm. As an example, the front of my forearm is heavily developed. They have been commented upon by numerous authorities as being

very impressive. So well developed are these muscles that when tense the belly of the forearm muscle reaches up into the wrist. They are known as the pronator muscles and are the most powerful in the forearm, supporting the wrist in every physical movement so much that it is impossible to cause a wrist strain when they are fully developed.

The Europeans all seem to be well blest with fine arms mainly because of their love for sports involving arm strength. Kettle bell and block weight juggling and spinning are favorite practices with them. Such sports vigorously exercise the forearm. Without good muscular pronator development you cannot hope td excel in gripping feats. These muscles play a great part in wrist strength and as I have explained in my case they are the muscles that go to build up a big wrist. The bulk of the length of the pronator muscles will extend to the wrist and the ligaments will thicken into strong heavy cables.

The next most interesting muscle is the supinator longus which starts from about the middle of the forearm in a strong tendon and winds over the arms at the elbow joint creating the heavy dimple seen when the arm is hanging by the side. It continues up along the humerus bone under the triceps almost up to the deltoid of the shoulder. This muscle is a co-worker with the triceps, being the main muscle to straighten and hold the arm locked at the elbow. When lifting a heavy weight, there acts as an accessory muscle to the supinator longus a muscle known as the supinator accessory which supports the major muscle in all heavy movements. Incidentally, it is this muscle which gives what the weight lifters call "the sick arm." Lifters do not pay enough attention to the forearm, or else they do not have any method of building these muscles in their system of training and later pay the price by causing a strain which tears part of this muscle from its seat of origin or insertion, making the arm terribly weak and sometimes very painful.

The supinator longus is really the chief muscle that twists and untwists the arms. We are in the habit of saying the hand twists on the wrist but this never happens. It is always the supinator muscles of the arm that causes the one bone of the forearm to twist on the other at the elbow.

In the forearm we have three groups of muscle, the extensors, the flexors, and the pronators; therefore, if you are determined to build up a powerful forearm you must study these movements so that every muscle is brought out to its fullest. Variety of exercise is the key to muscular growth and power. In the Jowett Institute Course of Body Building there is an endless chain of

exercise. Every week the exercises are changed so that growth is stimulated from every source and great strength created from every angle.

Personally, I think I have covered all there is for you to know about the arm without going into too much detail. You have the facts and the next thing for me to do is to supply the means. In this wise I hope to give you exercises that will develop your arm from shoulder to wrist. But don't leave it all to exercise. Remember no matter how keen you are on body building there will be times when it will get monotonous and you will feel fed up or discouraged. The only way to offset this is to include some of the many forms of arm strength sport into your routine. It becomes interesting and you get the real joy of competition and you can see what progress you make. There are many ways and I really believe I owe as much to this side of arm practice as I do to exercise for giving me the arm size and strength I have got. When I commenced my biceps were 12 inches and forearm 11½. Today and for many years my biceps have measured a little more than 18 inches and my forearm 16 inches. Never get discouraged. You have equally as good a chance to win as I ever had and more. I had no one to help me but you can through this booklet profit by my mistakes, experiences and success.

Most people have an erroneous conception of arm bone qualifications. They seem to think unless a man has arm bones unusually thick he will never have a big strong arm. While bone thickness does help to give a large measured arm, yet I have found the difference in bone thickness between the average boned man and the strong armed man is of such minor difference that it can not be said the difference will influence arm growth and strength very much. In other words, I know that every man for his size, has better possibilities for building a good-sized powerful arm than he has of building some other part of the body where greater bone thickness exists. In promoting muscular growth the man with heavy, big bones has a much better chance than his less fortunate comrade but I can recite numerous cases of men with enormous arm strength whose bony construction is average. Take Sandow, Moss, Moerki, Inch, Coulter, Willoughby, as examples, none of whom can be classified as heavy arm boned men but each has wonderful arm development and strength.

The arms are governed more or less by your general build. That is, a 140 lb. man will never have a 17-inch biceps unless he increases his entire muscular structure to a greater body weight. Take any of the just mentioned men and you will find their arm measurements run about equal to those of the heavy

boned men, and as far as arm strength is concerned they are just as strong.

Before I began to increase my arm proportions my wrist measurement was only that of the average person. My arm was always developed in proportion to my body weight. When I was a middle weight I did not have the sized arm I have now, nor the wrist, but it was big in proportion and strong. As I increased my body weight and general proportions, my wrist took on a total increase of nearly two inches. It would be foolish to assume that the bones thickened two inches. This size was an accumulation of muscle and thickened sinews.

The structure around the elbow became denser as the biceps and triceps grew. It was all a matter of perseverance and knowing the right training to follow. You will be surprised to notice as your arms grow how the shoulder muscles will increase. The reason for this is the arm and shoulder muscles are connected and influenced by the back and chest, the latter also increase, in the end leading to a bigger and better upper body development. You never saw a 140 lb. man with a 17-inch or 18-inch biceps. If it were possible, they would look like monstrosities. Some at 140 lb. body weight claim they have a 16½ or 17 inch biceps but if you took the tape measure and applied it yourself, you would find it nearer 14½ or 15 inch, which is good for that body weight.

Arm strength affords more diversity and pleasure than any other muscle group in the body. Look at all the fun you can have, arm wrestling, finger pulling, wrist turning, lifting, juggling, card tearing, iron breaking, bending and twisting, all of which go to help make training more pleasant and profitable. Of course, when all is said and done, it is the quality of your muscular structure that counts. Size alone means nothing. For years I have warned exercise fans and muscle builders against the danger of creating inflated tissues. This is caused by performing too many repetitions of movements devoid of concentration or resistance. It is as dangerous and as useless as the arm of the man developed in a one track mold. Cable exercisers create the worst condition and calisthenics come next. There is never any steel in the muscle structure of this type. Get away from it, practice variation, but don't strain your muscles. Sinews and ligaments are never thickened when taxed too strenuously. Remember exercise is not strain, it is a process of cultivation by gradual increased stimulation of the organic and physical sources.

I remember a young enthusiast who called on me. He was about 20 years old, with lots of pep but his face held something haggard which made me feel sorry for him. We talked quite a

while and throughout I could see he was just aching to show me his arm; finally he threw off his coat and balled up his biceps. "Don't you think I have a fine arm?" he said. It looked so but did not deceive me. As he relaxed the biceps tension, I felt the structure between my finger and thumb and increased the pressure of my touch which made him wince. "Gee! That hurts," he said. "You have very strong fingers." I knew he was wrong. The grip I had imposed would not have hurt a child but his muscle was inflated, swollen from contraction that had caused the blood to swell the tissue. It was that which hurt. A few simple stunts I asked him to do convinced me that all he had was a good looking arm. The haggard lines on his face told me the story well before I ever saw his arm.

Every body builder needs the advice and care of a capable instructor. Books are very helpful but why waste years trying to find the correct system for your physique when a capable instructor can place you right immediately.

My difficulty in arm building was not the forearm as is usually the case, but the biceps. In this probably I was fortunate. The fact was, I practiced so much wrist turning my forearms got considerable more training than is gotten by the average exerciser that the inside of the forearm grew remarkably. I also enjoyed the parallel bars and was decidedly good at slow "pull ups" and "push ups" from under the bars and from in between. Planches were popular with me and the benefit I derived from these forms of exercise marked their approval with powerful, well shaped triceps. I rarely bothered with "curling" exercises then or "chinning the bar" and I am glad now for it, otherwise I might have had foreshortened biceps like so many of my friends developed. When I turned to biceps development it came easy and the fact that my triceps were first built big and strong meant that the biceps could never become foreshortened, with the result I have always been blest with long muscled biceps with powerful ligaments.

This method of training I certainly would advise you to follow. All who have done it have always been very glad. Do not let anyone fool you that big bones are the chief assets of a big arm, the difference is too immaterial: only in the shoulders and legs do they mean anything of real importance. Bones thicken from muscular growth and muscles become strong from the quality of tissue you build in them. Build for yourself a system out of the exercises I have given here, and you will soon feel the joy of arm molding. If you get stuck in the program, don't forget to drop me a line. I will be glad to help you out at any time.

Exercises for Molding a Mighty Arm

Let us commence with exercises for the biceps and I will give you a series of biceps developers from which you can make up a weekly schedule. By this I mean the exercises will be too numerous for one training practice and because I know variety of exercise not only breaks the monotony of practice, but builds the muscle fibres strong by exercising from every angle.

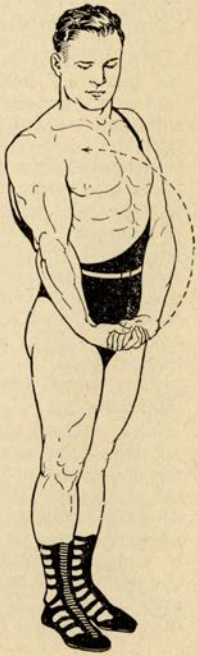
The first will be a resisting exercise claimed by those who practice Muscle Control to be the best.

EXERCISE ONE

Stand erect with feet together and clasp the left hand in the right in front of the body with the palm of the right hand facing directly forward and the arms held straight down by the sides. From this position turn the right hand on the wrist upward in a cupping motion so the space between the hand and the forearm is shortened. Now begin to bend the arm at the elbow and raise the right hand toward the right shoulder. Throughout this motion press down with all the power of the left arm to resist the upward trend of the right arm. This will bring the right arm biceps into play very forcibly in order to overcome the left hand pressure. When the right hand is curled to the shoulder allow the arm to return back to the original position, but in doing so, resist the downward action, this time by pulling up with the left hand.

Perform this exercise reversing the hands so as to develop both arms equally.

Half a dozen repetitions will give you some idea of the effect this exercise has upon the biceps.

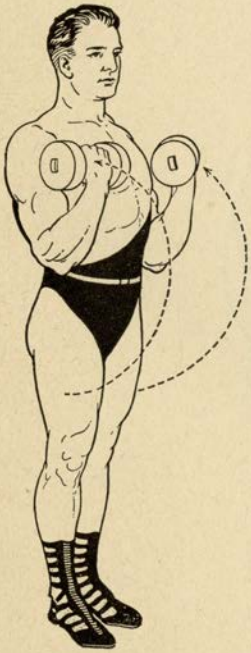


EXERCISE TWO

Take a dumbbell in the hand and stand perfectly erect with palm of the hand facing front. Now very slowly curl the dumbbell to the shoulder. This is a half circular movement of the hand from the straight arm hang position to the shoulder made by bending the arm at the elbow.

One point I must impress upon you right now. If you observe it you will get results; if you do not, you will save time and disappointment if you do not bother with the exercises at all.

Do not grip the sides of your body with the upper arm, neither allow the elbow to rest on the body. Both these practices are defects and, while they will make the practice easier, they will decrease the benefit of the exercise. If you were lifting a very heavy weight these defects would become helpful, but exercise and lifting are two different things.



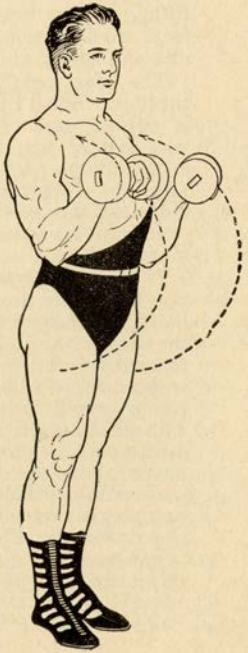
The effect on the muscles is not entirely controlled by the movement, that is only a part of it. The important part is how you hold your hand and arm, and the perfection of your bodily position. Never fool yourself that it is the number of times you perform an exercise that counts. It is the way you do them.

In this particular exercise the more you turn your thumb AWAY from the body the more front will the palm of the hand be, and if this is kept up throughout the movement the greater resistance will be supplied by the biceps which is what you are after. This holds good in all curling movements as also does the fact you must never allow the elbow to be forced back as the curling is in process. Elbow dropping, as we call it, shortens the curl and takes the effort from the biceps.

Perform the movement fairly slow, about six times to begin with.

EXERCISE THREE

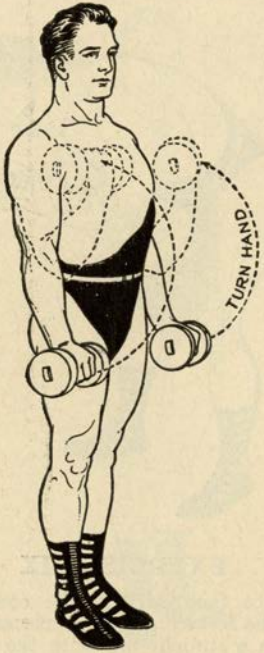
This exercise is what we call a back hand curl. That is, instead of curling with the palm of the hand up, the palm faces down. This is done in two ways. One is to curl the hand with the hand in a straight line with the forearm and the other is to allow the hand to bend downwards on the wrist. You will not be able to curl as much or as often from the first position mentioned because the leverage imposed on the wrist minimizes your ability. The second method gives you the support of the big front forearm muscles, providing you with more physical cooperation. Use the 5 lb. dumbbells in all these curling exercises unless advised otherwise.



EXERCISE FOUR

The following is a combination of the front and back hand curl. You commence to curl with the palm of the hand facing down. As the hand ascends in the curl turn the hand and the wrist and bring the front of the hand toward the shoulder. As the hand returns to the original position you rotate the wrist so the palm faces down as in the beginning.

You would find it beneficial every once in a while to reverse the movement, that is, where here you commence with the palm facing down and end up with the palm up, you commence with the palm up and end with it facing down. Simply reverse the movement. It works out great giving you wonderful biceps extension under contraction that makes it impossible to get knotty biceps.



EXERCISE FIVE

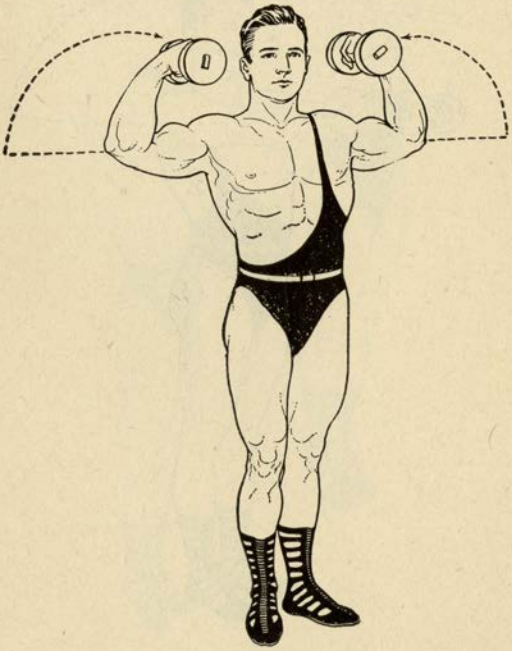
The following exercise is of a little different nature and one that will require your whole attention; otherwise, it will be of no value. Bend well over from the waist placing the left hand upon the left knee. Grasp a 5 lb. dumbbell in the right hand and from this bent over position curl the dumbbell to the shoulder. The particular feature of this exercise is to keep the elbow of the curling arm raised as high as possible. In order to do this you will be obliged to exert quite a lot of biceps power to overcome the forcing down caused by the curling from the position of the exercise. The higher you raise the elbow without straightening the body the greater benefit you will derive.

As a matter of fact the biceps are displayed more forcibly and are more clean cut from this position than from any other biceps pose.

EXERCISE SIX

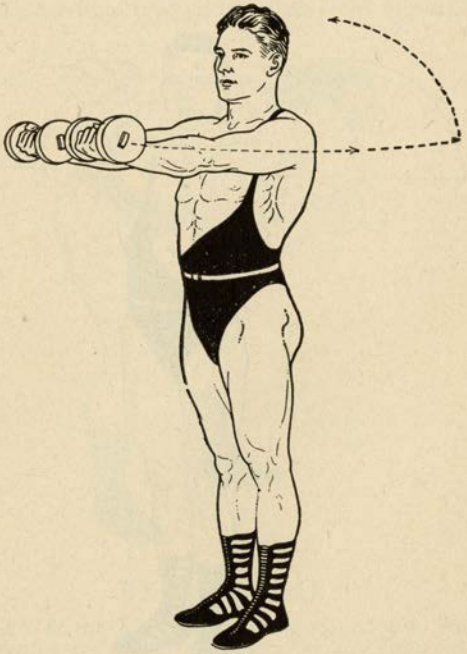
You are no doubt familiar with the commonly used biceps exercise of flexing the forearm on the upper arm from the position of the arms held in a straight line with the shoulders. Few get

much satisfaction from this exercise for no other reason than when the biceps begin to contract as the forearm is bent on the upper arm, the elbow lowers which brings about the same condition as explained in the last exercise. Watch yourself in front of a mirror and see how natural the bearing down tendency is, and from that point begin to put the exercise to some use. This exercise can be employed in several different ways. We have already considered the simultaneous double arm flexion with arms held out level with the shoulders. The second step is to perform the flexion working each arm alternately. Next perform the same motion but this time hold the arms straight out front forwards, you will find quite a different action upon the upper arm provided you do not drop the elbows.



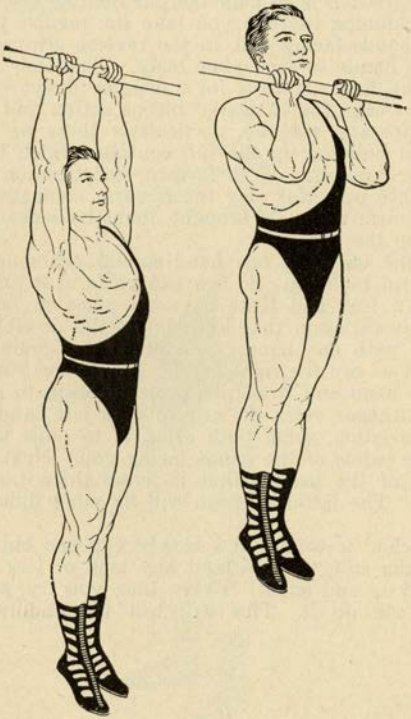
EXERCISE SEVEN

A good arm movement which will get the brachialis anticus as well as the biceps is to commence to contract the biceps from the last position explained in the last exercise, but as the arm flexes, allow the elbows to travel sideways until they are in a line level with the shoulders. There is no doubt the exercise will feel awkward at first. Of course, you can practice the movement from the position of the arms level with the shoulder and as you flex the arm bring the elbows forward. The biceps should not be fully contracted until the elbows are at the finale of the movement.



EXERCISE EIGHT

I do not intend to overlook the value of chinning the bar as a part of arm building. It is only as a complete arm builder that I am against it. There is a great deal of fun in chinning the bar anyway. It is a form of sport where one fan can test his estimated relative strength against that of his friends. Of course, the heavier a man is the less number of times will he be able to chin the bar.



One of the main things is not to have the chinning bar too thick as it interferes too much with the grip. Select a bar you can grip easily and at a height which you can reach only by giving a little spring.

Your first object should be to allow the body to hang as low as possible, by that I mean you must not flex any arm or shoulder muscles to hold the body up and in this way shorten the distance between the bar and the top of the head.

The first motion is to pull the body weight up until the chin touches the bar, and then lower to full extent of the arms, repeating the movement no more than three times to begin with.

The next variation is to chin the bar holding the reverse grip. In the first chinning exercise you take the regular grip with the back of the hands facing you, in the reverse grip you allow the palms of the hands to face your body. This last "chin" is not so easy as the first. It calls for a greater direct biceps action, while the first calls for elongated biceps action and great resistance of the forearm muscles, particularly those on the front of the arm, thus building up the full contours which is one of the two desirable requirements in forearm construction. The latter chin brings into powerful play the forearm supinators.

A different arm action is brought about by spreading the grip out wide upon the bar.

Chinning the bar with one hand should never enter into the practice of arm building. So few can perform it and with them it is simply a feat and feats have no place in body building.

But there is variation that leads up to the possibility of being able to chin with one hand. You grasp the chinning bar with one hand, let us say the right hand. Now grasp your right wrist with the left hand and from this position begin to chin yourself. As you get stronger, relax the grip of your left hand.

Another variation, using both arms, is to cross them. Try it first with the palms of the hands facing you. Next time reverse the position of the hands; that is, cross them but have them facing away. The latter position will be more difficult than the first.

Another "chin' is to see how slowly you can chin yourself to the bar. Hang still, then without any kick or jerk of the body, begin to pull up and count. Every time you try, see how much slower you can do it. This will test the endurance of your muscles.

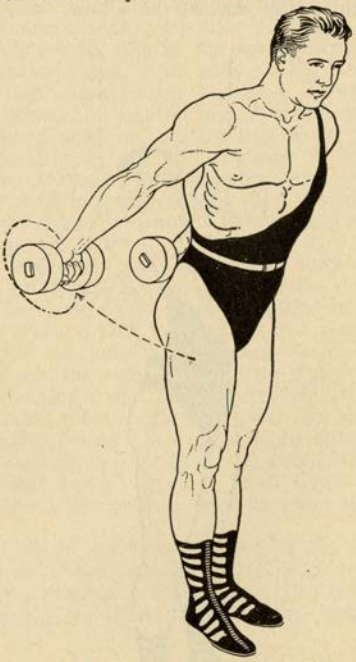
EXERCISE NINE

Unfortunately the number of exercises for building size and strength into the muscles on the back of the upper arm is not so plentiful, which makes triceps building a little more difficult.

As I have explained, the triceps are employed in straightening the arm, therefore, the first thought is to slowly press overhead fairly heavy dumbbells. This is partly right, or I might better say, right as long as you do not employ too heavy weights. The straighter you can get the arm the more triceps action is involved so when pushing overhead reach up as high as you can with the arm and straighten the arm at the elbow.

EXERCISE TEN

A tricep exercise I have always liked is as follows: Take a light dumbbell in the hand and stand in the erect position, turn the hand around so the palm of the hand is facing front. Compel this as much as possible by forcing the hand to turn the thumb out. Now you begin to make the triceps work by raising the arm backwards as far as possible. Keep the arm tight to the sides and you will secure greater contraction. In order to further stimulate triceps action bend forwards, but be sure to keep the arms to the sides and the palms forward.



EXERCISE ELEVEN

As a progression upon the last exercise, when the arm has reached the limit of its backward march, twist the arm to the

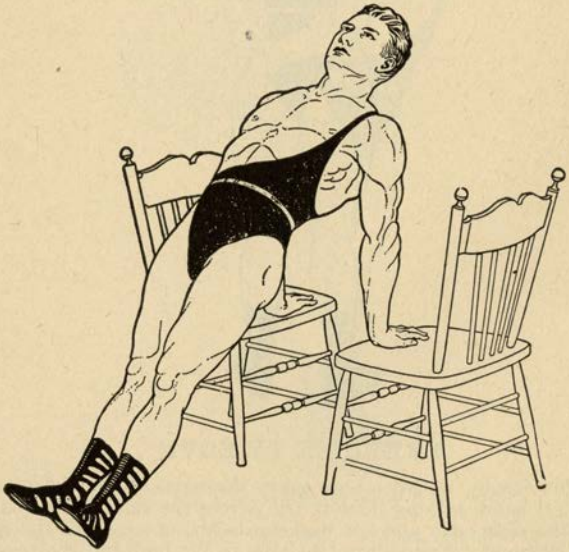
right and the left as much as you can, as the dotted line in the illustration with Exercise 10 shows. If you fail to feel any triceps effort you can bet your boots you are not doing the movement right. I can make my triceps fairly scream with this exercise and they are big and strong and accustomed to powerful volition.

EXERCISE TWELVE

Another triceps wakener is to grasp the wrist of the right hand by the left hand, passing the left arm across the small of the back. Stiffen the right arm and lift backwards trying to break the grip of the left hand. You will not be able to lift high but the triceps kick should be strongly felt.

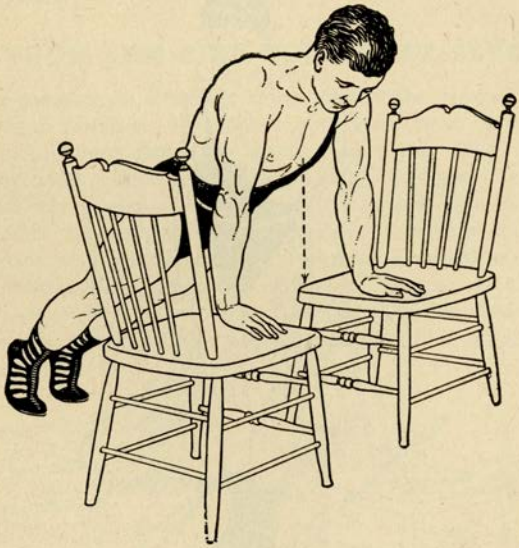
EXERCISE THIRTEEN

Take two chairs and space them apart side by side about twelve inches and stand between them. Next place the palms of the hand upon the seat of each chair toward the edge nearest to your body. The position of the hands is the most important. They must be placed so the fingers are pointing backwards, the wrists facing front. Now straighten the arm, walk forward until you feel you can go no further in safety. Straighten out the body by lifting up the hips and from this position, by bending the elbows, allow yourself to be lowered between the chairs as far as you can go. The effort will come when you straighten the arms. This must go *straight* and you must not heave the body in order to help the movement.



EXERCISE FOURTEEN

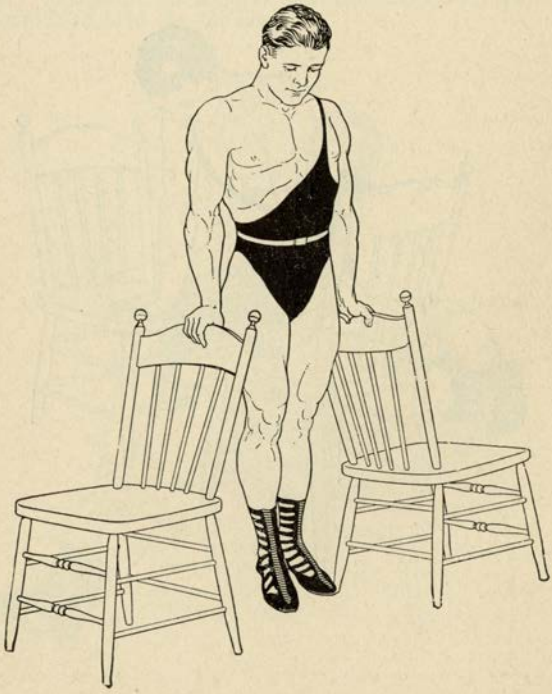
Place the palms of each hand on the seat of each chair and face down between them. Extend the feet along the floor until the legs are straight, at the same time keep the arms rigid. From this position bend the arm and lower the body down between the chairs past the seats. Keep the elbows tight to the sides and without raising the hips or changing the position of the feet press yourself back to arm's length.



EXERCISE FIFTEEN

Another good triceps builder is practiced by standing between two high-backed chairs. Straighten the arms and place the hands upon each chair back, then raise the feet off the floor. Next very slowly, lower the body as low as you can by bending the arms, then press yourself to a perfect straight arm without swinging the body.

In the most of the exercises I have purposely avoided advising how many repetitions to perform with each exercise. That should be up to you. Too many counts is wrong. Start with six



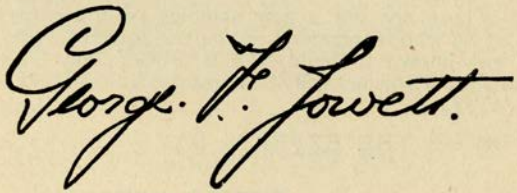
movements on those you are doubtful of and work up to the number of repetitions that you feel necessary to do the trick. Don't hold yourself down to any hidebound number of repetitions. Some days you will feel like doing more, other days less, so let your daily store of energy guide you.

Every exercise given here will help considerably to develop the muscles of the forearm and wrist. Bending and twisting iron is good forearm practice. Unfortunately we cannot all do this at home, so in place of this form of exercise, practice twisting the wrist with a dumbbell in the hand.

Another good exercise is to grasp the end of the dumbbell in the hand and with the other end describe a circle with a wrist movement in much the same way as you would if you were holding a stick.

DOES YOUR ARM FILL YOUR COAT SLEEVE?

Does it measure 16 inches or more around the biceps? Does your forearm measure 13½ inches and your wrist 8 inches? These measurements should be within your reach. Even if you think your body weight is too low to make it possible to make these gains, my system of teaching will show you how they can be obtained. No course is so carefully gotten together. My weekly letters and lectures explain everything of importance in a manner never before attempted. Give me the chance to help you make your dreams come true. Let me show you how to fill your coat sleeve with an arm packed with steel-like muscles.



EXPERTS SAY, "THE JOWETT COURSE IS THE GREATEST IN THE WORLD"

"Jowett's methods — and only his — are responsible for my strength and fine physique. There is no end to his knowledge." THE JOWETT SYSTEM IS THE GREATEST IN THE WORLD!" says R. F. Kelley, Physical Director Y. M. C. A., Atlantic City, N. J.

"Every man and boy should enroll for the Jowett Course to build a body to be proud of throughout life! JOWETT METHODS ARE BEST BY TEST," says Staff Sgt. Moss, trainer of British Armed Forces.

"I have profited greatly from your instructions. So will everyone who practises your thorough method of training for health and physical fitness," says Dr. L. Raferty, prominent heart specialist.

"I am a teacher of body building for many years, but unhesitatingly say that the Jowett Institute of Physical Culture IS THE BEST that has ever been put before the public," says Oscar Matthis, regarded as one of America's foremost trainers.

These are but a few samples of the experts all over the world who recommend to you the Jowett Course as the greatest way known to build YOUR BODY into STRENGTH AND BEAUTY you will be proud of! So take a HE-MAN'S WAY. . . . . .

DO AS THE EXPERTS SAY

ENROLL TODAY!

ARE YOU UNDERWEIGHT?

If you are, you probably lack the full stamina that should be yours to carry out the aims of your ambitious mind.

Increasing weight is not altogether a question of diet. It is controlled by a combination of factors that control right living. Learn how to adjust these conditions to your individual need and you will become a splendid, balanced and efficient living machine to carry out your desires in life, and win success and friends.

Who cares for a skinny, scrawny guy, with bones sticking out everywhere through his skin? No one. All the time someone is advising him to do one thing or another to gain weight. Seldom is this advice right. Jowett has proved in thousands of cases of skinny fellows like you that he can produce results, sometimes amazing ones, turning bags of skin and bone into Champion athletes.

Diet will help somewhat, but it will never restore power to robbed muscle tissue that has become soft and flabby, or give you a balanced symmetrical development, big arms of might or a deep robust chest. You need a safe, scientific method that helps you build slabs of robust muscle ALL OVER YOUR BODY and takes care of your inner organs at the same time.

THE JOWETT COURSE IS THE WAY

SO ENROLL TODAY!

WHAT OTHERS LIKE YOU SAY THE JOWETT COURSE DID FOR THEM!

NOW HAS AN HEROIC 44½ INCH CHEST

"I have just got through taking my exercises and measured my chest. When I looked at the tape measure I almost fainted for I now measure just 44½ inches normal chest. Now if anybody can beat that in less than three months' home training, I'll eat my shirt—buttons and all. You sure have a wonderful Course," writes Thomas Cooney.

JOWETT PUPIL BECOMES NATIONAL CHAMPION

"All I have I owe to your technique. Everybody should be a Jowett pupil," writes John Gauss, Philadelphia, Pa. Sesqui-Centennial and National Champion.

PUT 4 INCHES ON CHEST IN FOUR WEEKS

"I put four inches on my chest in four weeks. I'm proud to be a Jowett pupil," writes L. Thompson, Kansas City, Kans.

FEELS GREAT!

"I am no longer constipated and short winded, but can breathe much deeper. Well, to make a long story short, I FEEL GREAT!" writes Warren Kaslo, New York City.

YOU, too, should begin getting results. Join the Army of Jowett Pupils and hold the pace and win the race.

BUILD YOUR BODY THE BEST WAY . . .

ENROLL TODAY!

WHY GEORGE F. JOWETT—OUR PHYSICAL DIRECTOR, IS CALLED "CHAMPION OF CHAMPIONS" and "BUILDER OF CHAMPIONS"

1. George F. Jowett holds more records for strength, more world Championships than any man living, or than any man ever did at any one time.
2. He has built more strength champions than any other teacher or trainer.
3. He broke the record of the strongest man on earth — Arthur Saxon—the only man to ever beat any of Saxon's records.
4. Was the first heavyweight in the world to SWING more than his own bodyweight overhead from the ground with one hand.
5. He was the first strength athlete on the American Continent to lift over double his bodyweight overhead with two hands.
6. Won four Open Contests to the world for the Most Perfect Physique.
7. He was the first strength athlete to prove he could increase a perfectly built middleweight into a perfectly built heavyweight, which he did on himself.
8. Alan Calvert, America's pioneer authority on strength and body building said, "George F. Jowett was the world's most scientific strength athlete."
9. He is proclaimed by eminent authorities all over the world as "The most scientific body building expert of our times."

You can ask for no greater proof that George F. Jowett is YOUR BEST INSTRUCTOR. You can be proud to say that George F. Jowett trained YOU.

Published by
The Jowett Institute of Physical Culture